



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

COPY

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Ms. Kristin M. Gordon, P.E.  
All4 Inc.  
2393 Kimberton Road  
P.O. Box 299  
Kimberton, PA 19442

Dear Ms. Gordon:

In your letter dated August 13, 2012, you requested clarification by the U.S. Environmental Protection Agency (EPA) regarding compliance with 40 C.F.R. 60, Subpart Ec, "Standards of Performance for Hospital/Medical/Infectious Waste Incinerators (HMIWI) for Which Construction is Commenced After June 20, 1996." Specifically, you asked whether the use of a bypass stack during startup and shutdown would be considered a violation of certain emissions limits in Subpart Ec, and whether the provisions of §§60.56c(e)(5), (f)(6), and (g)(5) are only intended to apply during "operation" of the affected facility. For the reasons explained below, EPA would view the use of a bypass stack at any time, including during startup and shutdown, as a violation of the emissions limits listed in 40 C.F.R. 60.56c(e)(5), (f)(6), and (g)(5).

As you correctly stated in your letter, startup and shutdown, as defined in §60.51c, are limited to periods when waste is not being combusted in the HMIWI unit.<sup>1</sup> The September 15, 1997, originally promulgated rule<sup>2</sup> specified in §60.56c(a) that emissions limits applied at "all times except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical/infectious waste is charged to the affected facility during startup, shutdown, or malfunction." Sections 60.56c(e)(5), (f)(6) and (g)(5) of the 1997 rule then each provided that "[u]se of a bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emission limits." Thus, the 1997 regulation did not implicitly assume, absent the explicit parenthetical exemption for startup, shutdown and malfunction (SSM) periods, that the prohibition on the use of bypass stacks applied only during periods that constituted "operation."<sup>3</sup>

<sup>1</sup> See 40 CFR 60.51c. "Startup" means "the period of time between the activation of the system and the first charge to the unit. For batch HMIWI, startup means the period of time between activation of the system and ignition of the waste." "Shutdown" means "the period of time after all waste has been combusted in the primary chamber. For continuous HMIWI, shutdown shall commence no less than 2 hours after the last charge to the incinerator. For intermittent HMIWI, shutdown shall commence no less than 4 hours after the last charge to the incinerator. For batch HMIWI, shutdown shall commence no less than 5 hours after the high-air phase of combustion has been completed."

<sup>2</sup> 62 FR 48348.

<sup>3</sup> 40 CFR 60.51c defines "operation" to mean "the period during which waste is combusted in the incinerator excluding periods of startup or shutdown."

While the 2007 and 2008 proposed amendments to the HMIWI rule did not address startup and shutdown provisions, as the proposals pre-dated the U.S. Court of Appeals for the D.C. Circuit's ruling in *Sierra Club v. EPA*,<sup>4</sup> the October 6, 2009 amended rule<sup>5</sup> revised sections 60.56c(a), (e)(5), (F6) and (g)(5) to state that "[t]he emissions limits apply at all times," and that "[u]se of a bypass stack shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emissions limits." EPA explained in the preamble to the 2009 rule that this change was made following the *Sierra Club v. EPA* vacatur of certain provisions in EPA's Clean Air Act (CAA) section 112 regulations governing emissions of hazardous air pollutants during SSM periods. See 74 FR at 51393-95. While the Court's decision only directly affected some CAA section 112(d) rules, the "legality of source category-specific SSM provisions such as those adopted in the 1997 HMIWI rule is questionable."<sup>6</sup>

EPA therefore removed the SSM provisions in the final rule, but viewed this as being of little consequence, since "[b]ased on the 1997 HMIWI rule's definitions of the terms 'startup' and 'shutdown,' no waste should be combusted during these periods, so emissions should be low during them—essentially the emissions from burning natural gas. [...] Consequently, it should not be possible for HMIWI to exceed the applicable emissions limits during startup and shutdown periods. This suggests that the exemption from standards during startup and shutdown is of virtually no utility to HMIWI, such that there is any need for EPA to retain the exemption in today's final rule."<sup>7</sup> EPA further explained that the agency expects that "deletion of the SSM exemption will have very little, if any, impact on HMIWI units' compliance status. In the event that sources, despite their best efforts, fail to comply with applicable standards during SSM events (as defined by the rule), EPA will determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during SSM periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. [...] Therefore, it is similarly unnecessary to accept other commenters' recommendations to specify mandatory penalties during SSM events or impose unique pollution controls for *bypass events*—these concerns should be adequately addressed by today's removal of the SSM exemption, *which includes removal of the 1997 rule's exemption during SSM periods to the prohibition of using a bypass stack.*"<sup>8</sup> (Emphasis added.)

In your August 13, 2012, letter, you appear to suggest that in the 2009 rule amendments EPA did not deliberately remove the SSM exemption from the prohibition on use of bypass stacks.<sup>9</sup> You also state that you believe that since only auxiliary fuel is used during startup and shutdown and "bypass of the control equipment is an operational requirement during startup and shutdown to protect the integrity of the equipment," that there is a conflict with the requirement that the "[u]se of the bypass stack shall constitute a violation..."<sup>10</sup> Your letter also asserts that EPA indicated in the 2009 rule that the agency "was not concerned with the ability of an HMIWI

<sup>4</sup> 551 F.3d 1019 (DC Cir. 2008).

<sup>5</sup> 74 FR 51368.

<sup>6</sup> 74 FR at 51394.

<sup>7</sup> 74 FR at 51394.

<sup>8</sup> 74 FR at 51394-95.

<sup>9</sup> All4 Letter at 1-2.

<sup>10</sup> All4 Inc. Letter at 2.

to comply with the emission limits in the standard during startup and shutdown operations when only natural gas was being fired.”<sup>11</sup> EPA does not agree with these suggestions and assertions.

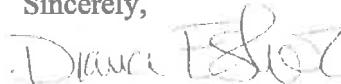
First, as noted above and in the 2009 rule’s preamble, sections §§ 60.56c(e)(5), (f)(6) and (g)(5) were explicitly revised to remove the prior regulatory exemptions for SSM periods and to state that “[u]se of the bypass stack shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emissions limits.” Consequently, by the terms of the 2009 rule, the EPA continued to not limit the prohibition to periods of “operation” as defined in §60.51c that do not include SSM periods. The EPA intended that the use of a bypass continue to generally constitute a violation, and extended this prohibition to the previously explicitly exempted SSM periods. The EPA retained the 1997 rule’s requirement in section 60.58c(d)(8) that upon “any use of the bypass stack,” owners and operators must record and report the event, including “the duration, reason for malfunction, and corrective action taken.”

Second, while EPA in the 2009 rule did not foresee the use of an auxiliary fuel such as natural gas posing a problem in meeting the emissions limits in the final rule, this should not be construed to mean either that EPA did not intend for the emission limits to apply in such situations or that the use of the bypass stack during startup and shutdown is warranted. A “bypass stack” is defined in §60.51c as “a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.” While an event at the unit during incinerator operation or during startup and shutdown might result in the operator deciding to use the bypass stack to protect the integrity of the control devices, EPA in the 2009 preamble made clear that such events, including during periods of startup and shutdown, would generally be considered violations.

No rationale was provided in your request to support the position that using the control devices to treat the combustion gases from natural gas or another auxiliary fuel during startup and shutdown would cause severe damage to the air pollution control equipment, or that use of a bypass for some other reason should not be a violation of the applicable standards. Therefore, based on the regulatory language of sections 60.56c(a), (e)(5), (f)(6) and (g)(5), as amended in 2009, and on the preamble discussion of the 2009 rule, EPA considers the prohibition on the use of bypass stacks contained therein to apply at all times, regardless of whether an auxiliary fuel or waste is being combusted in the unit.

If you have any additional questions, please contact Kathleen Cox at (215) 814-2173, or Mike Gordon at (215) 814-2039.

Sincerely,



Diana Esher, Director  
Air Protection Division

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<sup>11</sup> All 4 letter at 2.